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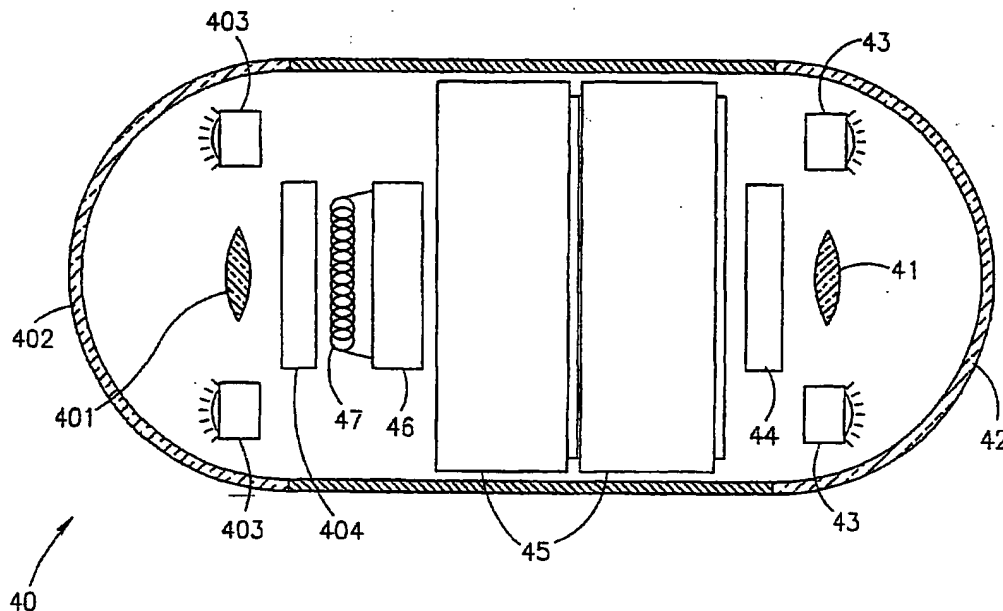
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[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR WIDE FIELD IMAGING OF BODY LUMENS



(57) Abstract: A system and method for wide angle imaging of body lumens are provided. The system (40) comprises at least one imager (401) and an optical system (44-47) having a plurality of optical paths for imaging images from within the body lumen onto a device that is configured to be inserted into and pass through body lumens such as an endoscope, a needle or a swallowable capsule.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL02/00042

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04N 7/18, 9/47

US CL : 348/77

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 348/77, 76; 600/476, 133; 128/4.

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X, P	US 6,240,312 B1 (ALFANO et al) 29 May 2001 (23.10.1998) columns 4-7	1-25
A	US 5,604,531 A (IDDAN et al.) 18 February 1997, (17.01.1995) All	
A	US 4,278,077 A (MIZUMOT) 14 July 1981, (24. 07.1979) All.	
A	US 5,643,175 A (ADAIR) 01 July 1997 (05.02.1996), All	

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"I" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

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INTERNATIONAL SEARCH REPORT

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BOX II. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In order for more than one species to be examined, the appropriate additional examination fees must be paid. The species are as follows:

- I) Imager and Optical System.
- II) Capsule with optical window, Imager and Optical System.
- III) Endoscope with imager with multiple optical paths.
- IV) Transmitter with imager and optical system.
- V) Receiver with imager and optical system.

The claims are deemed to correspond to the species listed above in the following manner:

- Group I corresponds to claims 1-11 and 12-25.
- Group II corresponds to claims 26, 27, 37 and 38.
- Group III corresponds to claims 28, 29-36, and 39.
- Group IV corresponds to claims 40-47.
- Group V corresponds to claims 48-50.

The following claim(s) are generic: claims 1 and 12.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Claims 1 and 12 are drawn to any imaging device capable of imaging the inside of a body. Claims 26 and 37 claim a capsule with integrated camera with integrated imaging device and system for imaging the inside of a body.

Claims 28, 29, and 39 are drawn to an Endoscope with a plurality of optical paths. Claim 40 is drawn to a transmitter, and claim 48 is drawn to a receiver.